

IN THE CLAIMS:

Claims 22, 29, 31, 35, 37, 44, and 70 through 141 were previously cancelled. Claims 1-21, 23-28, 30, 32-34, 36, 38-43, 45-69, 142, 162, 171, and 186 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

1. (Currently amended) A conductive structure for connecting a contact pad of a semiconductor device and a contact pad of a substrate, comprising:
a female member comprising dielectric material and configured to be secured to the contact pad of one of the semiconductor device and the substrate, ~~said- the~~ female member defining an aperture configured to be located over the contact pad;
a conductive center partially filling ~~said- the~~ aperture, with an upper portion of ~~said- the~~ aperture being open;
a male member configured to be secured to the corresponding contact pad of ~~the other- another~~ of the substrate and the semiconductor device, ~~said- the~~ male member including an end configured complementarily to ~~said- an~~ upper portion of ~~said- the~~ aperture of ~~said- the~~ female member, ~~said- the~~ male member including an aperture configured to be located over the corresponding contact pad; and
a conductive center substantially filling ~~said- the~~ aperture of ~~said- the~~ male member.

2. (Currently amended) The conductive structure of claim 1, wherein ~~said- the~~ aperture of ~~said- the~~ female member is configured to partially limit insertion of ~~said- the~~ male member thereinto.

3. (Currently amended) The conductive structure of claim 2, wherein ~~said- the~~ aperture comprises an inner ledge configured to prevent further insertion of ~~said- the~~ male member thereinto.

4. (Currently amended) The conductive structure of claim 2, wherein ~~said~~ the aperture tapers inwardly.
5. (Currently amended) The conductive structure of claim 1, wherein an outer surface of ~~said~~ the male member is configured to partially limit insertion of ~~said~~ the male member into ~~said~~ the aperture of ~~said~~ the female member.
6. (Currently amended) The conductive structure of claim 5, wherein ~~said~~ the outer surface is tapered.
7. (Currently amended) The conductive structure of claim 6, wherein ~~said~~ the outer surface has a frustoconical configuration.
8. (Currently amended) The conductive structure of claim 5, wherein ~~said~~ the male member has an end portion with a smaller periphery than a base portion of ~~said~~ the male member.
9. (Currently amended) The conductive structure of claim 8, wherein ~~said~~ the outer surface comprises an outer ledge between ~~said~~ the end portion and ~~said~~ the base portion of ~~said~~ the male member.
10. (Currently amended) The conductive structure of claim 1, wherein at least one of ~~said~~ the male member and ~~said~~ the female member comprises a photopolymer.
11. (Currently amended) The conductive structure of claim 10, wherein ~~said~~ the at least one of ~~said~~ the male member and ~~said~~ the female member comprises a plurality of superimposed, contiguous, mutually adhered layers of ~~said~~ the photopolymer.

12. (Currently amended) The conductive structure of claim 1, wherein ~~said~~ the aperture of ~~said~~ the female member is configured to facilitate alignment of ~~said~~ the male member and ~~said~~ the female member.

13. (Currently amended) The conductive structure of claim 12, wherein ~~said~~ the aperture tapers inwardly.

14. (Currently amended) The conductive structure of claim 1, wherein an outer surface of ~~said~~ the male member is configured to facilitate alignment of ~~said~~ the male member and ~~said~~ the female member.

15. (Currently amended) The conductive structure of claim 14, wherein ~~said~~ the outer surface tapers outward from ~~said~~ the end to a base portion thereof.

16. (Currently amended) The conductive structure of claim 15, wherein ~~said~~ the outer surface has a frustoconical configuration.

17. (Currently amended) The conductive structure of claim 1, wherein at least one of ~~said~~ the conductive centers comprises at least partially unconsolidated conductive material.

18. (Currently amended) The conductive structure of claim 17, wherein ~~said~~ the at least partially unconsolidated conductive material is at least partially uncured conductive resin.

19. (Currently amended) The conductive structure of claim 18, wherein ~~said~~ the at least partially uncured conductive resin is uncured conductive resin.

20. (Currently amended) The conductive structure of claim 1, wherein at least one of ~~said~~ the conductive centers comprises a thermoplastic conductive elastomer.

21. (Currently amended) The conductive structure of claim 1, wherein at least one of ~~said~~ the conductive centers comprises a solder, a metal, or a metal alloy.

22. (Cancelled)

23. (Currently amended) The semiconductor device component of claim 30, wherein ~~said~~ the substrate comprises a flip-chip type semiconductor device.

24. (Currently amended) The semiconductor device component of claim 23, wherein ~~said~~ the flip-chip type semiconductor device comprises a flip chip die.

25. (Currently amended) The semiconductor device component of claim 23, wherein ~~said~~ the flip-chip type semiconductor device comprises a ball grid array package.

26. (Currently amended) The semiconductor device component of claim 30, wherein ~~said~~ the substrate comprises a chip-scale package.

27. (Currently amended) The semiconductor device component of claim 30, wherein ~~said~~ the substrate comprises a carrier substrate.

28. (Currently amended) The semiconductor device component of claim 30, wherein ~~said~~ the first member is configured to contain ~~said~~ the conductive center over ~~said~~ the at least one contact pad.

29. (Cancelled)

30. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure:
 secured directly to and protruding from ~~said~~ the at least one contact pad;
 including an aperture through ~~the~~ a length thereof; and
 configured complementarily to and to be received by an aperture formed in a second
 member of ~~said~~ conductive ~~the alignment~~ structure, with ~~said~~ the second member
 secured to a corresponding contact pad of another substrate of another
 semiconductor device component; and
a conductive center in ~~said~~ the aperture of ~~said~~ the first member, with ~~said~~ the conductive
 center being laterally confined within at least a base portion of ~~said~~ the aperture and
 substantially filling ~~said~~ the aperture.

31. (Cancelled)

32. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure:
 secured directly to and protruding from ~~said~~ the at least one contact pad;
 including an aperture through ~~the~~ a length thereof;
 configured complementarily to a second member of ~~said~~ a conductive structure, with ~~said~~
 the second member secured to a corresponding contact pad of another substrate of
 another semiconductor device component; and
 including an outer surface having a smaller periphery at an end thereof than at a base
 portion thereof, ~~said~~ the outer surface including an outer ledge located between
 ~~said~~ the end and ~~said~~ the base portion; and
a conductive center in ~~said~~ the aperture of ~~said~~ the first member, with ~~said~~ the conductive
 center being laterally confined within at least a base portion of ~~said~~ the aperture and
 substantially filling ~~said~~ the aperture.

33. (Currently amended) The semiconductor device component of claim 32, wherein ~~said~~ the outer surface tapers outwardly from ~~said~~ the end to ~~said~~ the base portion.

34. (Currently amended) The semiconductor device component of claim 33, wherein ~~said~~ the outer surface has a frustoconical configuration.

35. (Cancelled)

36. (Currently amended) The semiconductor device component of claim 38, wherein ~~said~~ the aperture is configured to receive at least an end of ~~said~~ the second member.

37. (Cancelled)

38. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure:
 secured directly to and protruding from ~~said~~ the at least one contact pad;
 including an aperture through ~~the~~ a length thereof, an upper portion of ~~said~~ the aperture
 having a larger periphery than a base portion of ~~said~~ the aperture, with an internal
 ledge being disposed around at least a portion of a wall of ~~said~~ the aperture
 between ~~said~~ the upper portion and ~~said~~ the base portion; and
 being configured complementarily to a second member of ~~said~~ conductive ~~the~~ alignment
 structure, with ~~said~~ the second member secured to a corresponding contact pad of
 another substrate of another semiconductor device component; and
a conductive center partially filling ~~said~~ the aperture of ~~said~~ the first member, with ~~said~~ the
 conductive center being laterally confined within at least a base portion of ~~said~~ the
 aperture.

39. (Currently amended) The semiconductor device component of claim 38, wherein ~~said the~~ aperture tapers inwardly from ~~said the~~ upper portion to ~~said the~~ base portion.

40. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure:
 secured directly to and protruding from ~~said the~~ at least one contact pad;
 including an aperture through ~~the~~ a length thereof; and
 configured complementarily to a second member of ~~said conductive the alignment~~
 structure, with ~~said the~~ second member secured to a corresponding contact pad of
 another substrate of another semiconductor device component; and
a conductive center comprising an at least partially unconsolidated conductive material in ~~said~~
 the aperture of ~~said the~~ first member, with ~~said the~~ conductive center being laterally
 confined within at least a base portion of ~~said the~~ aperture.

41. (Currently amended) The semiconductor device component of claim 40, wherein ~~said the~~ at least partially unconsolidated conductive material is an at least partially uncured conductive resin.

42. (Currently amended) The semiconductor device component of claim 41, wherein ~~said the~~ at least partially uncured conductive resin is an uncured conductive resin.

43. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure:
 secured directly to and protruding from ~~said the~~ at least one contact pad;
 including an aperture through ~~the~~ a length thereof; and

configured complementarily to a second member of ~~said~~ conductive ~~the alignment~~ structure, with ~~said~~ the second member secured to a corresponding contact pad of another substrate of another semiconductor device component; and
a conductive center comprising a thermoplastic conductive elastomer in ~~said~~ the aperture of ~~said~~ the first member, with ~~said~~ the conductive center being laterally confined within at least a base portion of ~~said~~ the aperture.

44. (Cancelled)

45. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure:
comprises a photopolymer;
is secured directly to and protrudes from ~~said~~ the at least one contact pad;
includes an aperture through ~~the~~ a length thereof; and
is configured complementarily to a second member of ~~said~~ a conductive structure, with
~~said~~ the second member secured to a corresponding contact pad of another substrate of another semiconductor device component; and
a conductive center partially filling ~~said~~ the aperture of ~~said~~ the first member, with ~~said~~ the conductive center being laterally confined within at least a base portion of ~~said~~ the aperture.

46. (Currently amended) The semiconductor device component of claim 45, wherein ~~said~~ the first member comprises a plurality of superimposed, contiguous, mutually adhered layers of ~~said~~ the photopolymer.

47. (Currently amended) A semiconductor device assembly, comprising:
at least one semiconductor device having a surface with at least one contact pad exposed thereto;
a substrate having a surface with at least one at least one contact pad exposed thereto, ~~said the~~ at
least one contact pad located correspondingly to ~~said the~~ at least one contact pad of ~~said~~
~~the~~ at least one semiconductor device; and
a conductive structure secured to ~~said the~~ at least one contact pad of ~~said the~~ at least one
semiconductor device and to ~~said the~~ at least one contact pad of ~~said the~~ substrate, ~~said~~
~~the~~ conductive structure having:
a first member comprising dielectric material secured directly to and protruding from one
of ~~said the~~ at least one semiconductor device and ~~said the~~ substrate, ~~said the~~ first
member including an aperture therethrough;
a conductive center disposed in ~~said the~~ aperture of ~~said the~~ first member in
communication with ~~said the~~ at least one contact pad; and
a second member secured directly to and protruding from another of ~~said the~~ at least one
semiconductor device and ~~said the~~ substrate, ~~said the~~ second member located
correspondingly to ~~said the~~ first member, ~~said the~~ second member including an
aperture therethrough; and
a conductive center disposed in ~~said the~~ aperture of ~~said the~~ second member in
communication with ~~said the~~ at least one contact pad, ~~said the~~ second member
configured to be interconnected with ~~said the~~ first member.

48. (Currently amended) The semiconductor device assembly of claim 47, wherein
one member of ~~said the~~ first member and ~~said the~~ second member has a receptacle configured to
receive at least an end of the other member of ~~said the~~ second member and ~~said the~~ first
member.

49. (Currently amended) The semiconductor device assembly of claim 48, wherein
~~said the~~ aperture of ~~said the~~ one member has an upper portion with a smaller periphery than a
base portion thereof.

50. (Currently amended) The semiconductor device assembly of claim 49, wherein ~~said~~ the aperture includes an inner ledge disposed between ~~said~~ the upper portion and ~~said~~ the base portion.

51. (Currently amended) The semiconductor device assembly of claim 49, wherein at least a portion of a wall of ~~said~~ the aperture tapers inwardly toward ~~said~~ the base portion.

52. (Currently amended) The semiconductor device assembly of claim 49, wherein ~~said~~ the aperture is configured to limit a distance the other member is inserted into ~~said~~ the receptacle.

53. (Currently amended) The semiconductor device assembly of claim 48, wherein another member of ~~said~~ the first member and ~~said~~ the second member has an outer surface with a smaller periphery at ~~said~~ the end than at a base portion thereof.

54. (Currently amended) The semiconductor device assembly of claim 53, wherein ~~said~~ the outer surface includes an outer ledge disposed between ~~said~~ the end and ~~said~~ the base portion.

55. (Currently amended) The semiconductor device assembly of claim 53, wherein ~~said~~ the outer surface tapers outwardly from ~~said~~ the end to ~~said~~ the base portion.

56. (Currently amended) The semiconductor device assembly of claim 55, wherein ~~said~~ the outer surface has a frustoconical configuration.

57. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said~~ the conductive center of at least one of ~~said~~ the first and second members comprises an at least partially unconsolidated conductive material.

58. (Currently amended) The semiconductor device assembly of claim 57, wherein ~~said~~ the at least partially unconsolidated conductive material is an at least partially uncured conductive resin.

59. (Currently amended) The semiconductor device assembly of claim 58, wherein ~~said~~ the at least partially uncured conductive resin is an uncured conductive resin.

60. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said~~ the conductive center of at least one of ~~said~~ the first and second members comprises a thermoplastic conductive elastomer.

61. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said~~ the conductive center of at least one of ~~said~~ the first and second members comprises a solder, a metal, or a metal alloy.

62. (Currently amended) The semiconductor device assembly of claim 47, wherein at least one member of ~~said~~ the first and second members comprises a photopolymer.

63. (Currently amended) The semiconductor device assembly of claim 62, wherein ~~said~~ the at least one member comprises a plurality of superimposed, contiguous, mutually adhered layers of ~~said~~ the photopolymer.

64. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said~~ the at least one semiconductor device comprises a flip-chip type semiconductor device.

65. (Currently amended) The semiconductor device assembly of claim 64, wherein ~~said~~ the flip-chip type semiconductor device is a semiconductor die with bond pads arranged in an array on a surface thereof.

66. (Currently amended) The semiconductor device assembly of claim 64, wherein ~~said- the~~ flip-chip type semiconductor device is a ball grid array package.

67. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said- the~~ at least one semiconductor device comprises a chip-scale package.

68. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said- the~~ substrate comprises a carrier substrate.

69. (Currently amended) The semiconductor device assembly of claim 47, wherein ~~said- the~~ substrate comprises another semiconductor device.

70.-141. (Cancelled)

142. (Currently amended) A conductive structure for connecting a contact pad of a semiconductor device and a contact pad of a substrate, comprising:
a female member configured to be secured to the contact pad of one of the semiconductor device and the substrate, the female member including an aperture configured to be located over the contact pad;
a conductive center partially filling the aperture with an upper portion of the aperture being open;
a male member configured to be secured ~~to the~~ to a corresponding contact pad of ~~the other~~ another of the substrate and the semiconductor device, the male member including an end configured complementarily to the upper portion of the aperture of the female member, the male member including an aperture configured to be located over the corresponding contact pad; and
a conductive center substantially filling the aperture of the male member,
at least one of the conductive center of the female member and the conductive center of the male member comprising at least partially unconsolidated conductive material.

143. (Previously presented) The conductive structure of claim 142, wherein the aperture of the female member is configured to partially limit insertion of the male member thereinto.

144. (Previously presented) The conductive structure of claim 143, wherein the aperture comprises an inner ledge configured to prevent further insertion of the male member thereinto.

145. (Previously presented) The conductive structure of claim 143, wherein the aperture tapers inwardly.

146. (Previously presented) The conductive structure of claim 142, wherein an outer surface of the male member is configured to partially limit insertion of the male member into the aperture of the female member.

147. (Previously presented) The conductive structure of claim 146, wherein the outer surface is tapered.

148. (Previously presented) The conductive structure of claim 147, wherein the outer surface has a frustoconical configuration.

149. (Previously presented) The conductive structure of claim 146, wherein the male member has an end portion with a smaller periphery than a base portion of the male member.

150. (Previously presented) The conductive structure of claim 149, wherein the outer surface comprises an outer ledge between the end portion and the base portion of the male member.

151. (Previously presented) The conductive structure of claim 142, wherein at least one of the male member and the female member comprises a photopolymer.

152. (Previously presented) The conductive structure of claim 151, wherein the at least one of the male member and the female member comprises a plurality of superimposed, contiguous, mutually adhered layers of the photopolymer.

153. (Previously presented) The conductive structure of claim 142, wherein the aperture of the female member is configured to facilitate alignment of the male member and the female member.

154. (Previously presented) The conductive structure of claim 153, wherein the aperture tapers inwardly.

155. (Previously presented) The conductive structure of claim 142, wherein an outer surface of the male member is configured to facilitate alignment of the male member and the female member.

156. (Previously presented) The conductive structure of claim 155, wherein the outer surface tapers outward from the end to a base portion thereof.

157. (Previously presented) The conductive structure of claim 156, wherein the outer surface has a frustoconical configuration.

158. (Previously presented) The conductive structure of claim 142, wherein the at least partially unconsolidated conductive material is at least partially uncured conductive resin.

159. (Previously presented) The conductive structure of claim 158, wherein the at least partially uncured conductive resin is uncured conductive resin.

160. (Previously presented) The conductive structure of claim 142, wherein at least one of the conductive centers comprises a thermoplastic conductive elastomer.

161. (Previously presented) The conductive structure of claim 142, wherein at least one of the conductive centers comprises a solder, a metal, or a metal alloy.

162. (Currently amended) A semiconductor device component, comprising:
a substrate having at least one contact pad exposed at a surface thereof;
a first member of an alignment structure secured to the at least one contact pad, the first member including an aperture through ~~the~~ a length thereof, the first member being configured complementarily to a second member of the ~~conductive~~ alignment structure secured to a corresponding contact pad of another substrate of another semiconductor device component; and
a conductive center comprising at least partially unconsolidated conductive material in the aperture of the first member.

163. (Previously presented) The semiconductor device component of claim 162, wherein the substrate comprises a flip-chip type semiconductor device.

164. (Previously presented) The semiconductor device component of claim 163, wherein the flip-chip type semiconductor device comprises a flip chip die.

165. (Previously presented) The semiconductor device component of claim 163, wherein the flip-chip type semiconductor device comprises a ball grid array package.

166. (Previously presented) The semiconductor device component of claim 162, wherein the substrate comprises a chip-scale package.

167. (Previously presented) The semiconductor device component of claim 162, wherein the substrate comprises a carrier substrate.

168. (Previously presented) The semiconductor device component of claim 162, wherein the first member is configured to contain the conductive center over the at least one contact pad.

169. (Previously presented) The semiconductor device component of claim 162, wherein the conductive center substantially fills the aperture.

170. (Previously presented) The semiconductor device component of claim 169, wherein the first member is configured to be received by an aperture formed in the second member.

171. (Currently amended) The semiconductor device component of claim 169, wherein an outer surface of the ~~jacket~~ first member has a smaller periphery at an end thereof than at a base portion thereof.

172. (Previously presented) The semiconductor device component of claim 171, wherein the outer surface includes an outer ledge located between the end and the base portion.

173. (Previously presented) The semiconductor device component of claim 171, wherein the outer surface tapers outwardly from the end to the base portion.

174. (Previously presented) The semiconductor device component of claim 173, wherein the outer surface has a frustoconical configuration.

175. (Previously presented) The semiconductor device component of claim 162, wherein the conductive center partially fills the aperture.

176. (Previously presented) The semiconductor device component of claim 175, wherein the aperture is configured to receive at least an end of the second member.

177. (Previously presented) The semiconductor device component of claim 175, wherein an upper portion of the aperture has a larger periphery than a base portion of the aperture.

178. (Previously presented) The semiconductor device component of claim 177, wherein an internal ledge is disposed around at least a portion of a wall of the aperture between the upper portion and the base portion.

179. (Previously presented) The semiconductor device component of claim 177, wherein the aperture tapers inwardly from the upper portion to the base portion.

180. (Previously presented) The semiconductor device component of claim 162, wherein the at least partially unconsolidated conductive material is an at least partially uncured conductive resin.

181. (Previously presented) The semiconductor device component of claim 180, wherein the at least partially uncured conductive resin is an uncured conductive resin.

182. (Previously presented) The semiconductor device component of claim 162, wherein the conductive center comprises a thermoplastic conductive elastomer.

183. (Previously presented) The semiconductor device component of claim 162, wherein the conductive center comprises a solder, a metal, or a metal alloy.

184. (Previously presented) The semiconductor device component of claim 162, wherein the first member comprises a photopolymer.

185. (Previously presented) The semiconductor device component of claim 184, wherein the first member comprises a plurality of superimposed, contiguous, mutually adhered layers of the photopolymer.

186. (Currently amended) A semiconductor device assembly, comprising:
at least one semiconductor device having a surface with at least one contact pad exposed thereto;
a substrate having a surface with at least one at least one contact pad exposed thereto, the at least one contact pad located correspondingly to the at least one contact pad of the at least one semiconductor device; and
a conductive structure secured to the at least one contact pad of the at least one semiconductor device and to the at least one contact pad of the substrate, the conductive structure having:
a first member secured to one of the at least one semiconductor device and the substrate, the first member including an aperture therethrough;
a conductive center disposed in the aperture of the first member, the conductive center in communication with the at least one contact pad;~~and~~
a second member secured to another of the at least one semiconductor device and the substrate, the second member located correspondingly to the first member, the second member including an aperture therethrough; and
a conductive center disposed in the aperture of the second member, the conductive center in communication with the at least one contact pad, the second member configured to be interconnected with the first member,
at least one of the conductive center of the first member and the conductive center of the second member comprising an at least partially unconsolidated conductive material.

187. (Previously presented) The semiconductor device assembly of claim 186, wherein one member of the first member and the second member has a receptacle configured to receive at least an end of the other member of the second member and the first member.

188. (Previously presented) The semiconductor device assembly of claim 187, wherein the aperture of the one member has an upper portion with a smaller periphery than a base portion thereof.

189. (Previously presented) The semiconductor device assembly of claim 188, wherein the aperture includes an inner ledge disposed between the upper portion and the base portion.

190. (Previously presented) The semiconductor device assembly of claim 188, wherein at least a portion of a wall of the aperture tapers inwardly toward the base portion.

191. (Previously presented) The semiconductor device assembly of claim 188, wherein the aperture is configured to limit a distance the other member is inserted into the receptacle.

192. (Previously presented) The semiconductor device assembly of claim 187, wherein another member of the first member and the second member has an outer surface with a smaller periphery at the end than at a base portion thereof.

193. (Previously presented) The semiconductor device assembly of claim 192, wherein the outer surface includes an outer ledge disposed between the end and the base portion.

194. (Previously presented) The semiconductor device assembly of claim 192, wherein the outer surface tapers outwardly from the end to the base portion.

195. (Previously presented) The semiconductor device assembly of claim 194, wherein the outer surface has a frustoconical configuration.

196. (Previously presented) The semiconductor device assembly of claim 186, wherein the at least partially unconsolidated conductive material is an at least partially uncured conductive resin.

197. (Previously presented) The semiconductor device assembly of claim 196, wherein the at least partially uncured conductive resin is an uncured conductive resin.

198. (Previously presented) The semiconductor device assembly of claim 186, wherein the conductive center of at least one of the first and second members comprises a thermoplastic conductive elastomer.

199. (Previously presented) The semiconductor device assembly of claim 186, wherein the conductive center of at least one of the first and second members comprises a solder, a metal, or a metal alloy.

200. (Previously presented) The semiconductor device assembly of claim 186, wherein at least one member of the first and second members comprises a photopolymer.

201. (Previously presented) The semiconductor device assembly of claim 200, wherein the at least one member comprises a plurality of superimposed, contiguous, mutually adhered layers of the photopolymer.

202. (Previously presented) The semiconductor device assembly of claim 186, wherein the at least one semiconductor device comprises a flip-chip type semiconductor device.

203. (Previously presented) The semiconductor device assembly of claim 202, wherein the flip-chip type semiconductor device is a semiconductor die with bond pads arranged in an array on a surface thereof.

204. (Previously presented) The semiconductor device assembly of claim 202, wherein the flip-chip type semiconductor device is a ball grid array package.

205. (Previously presented) The semiconductor device assembly of claim 186, wherein the at least one semiconductor device comprises a chip-scale package.

206. (Previously presented) The semiconductor device assembly of claim 186, wherein the substrate comprises a carrier substrate.

207. (Previously presented) The semiconductor device assembly of claim 186, wherein the substrate comprises another semiconductor device.